

WHAT IS CLAIMED IS:

1. A wireless communication apparatus transmitting and receiving data wirelessly, comprising:

a transmitting portion for transmitting the data through at least one frequency channel; and

5 a controller for obtaining a number of transmittable channels of a counterpart wireless communication apparatus that the wireless communication apparatus intends to communicate with, and processing to transmit the data through the transmitting portion according to the obtained number of transmittable channels.

2. The wireless communication apparatus of claim 1, wherein, when the counterpart wireless communication apparatus receives the data through a plurality of frequency channels, the controller transmits the data through the plurality of frequency channels to the counterpart wireless communication apparatus.

5 3. The wireless communication apparatus of claim 1, wherein, when the wireless communication apparatus is operated as a master, the controller obtains the number of transmittable channels of the counterpart wireless communication apparatus, by performing an inquiry operation with the counterpart wireless communication apparatus.

4. The wireless communication apparatus of claim 1, wherein the at least one frequency channel includes a basic channel for supporting a communication with other wireless communication apparatuses having a single channel, and a plurality of additional channels consecutively or 5 inconsecutively positioned with respect to the basic channel.

5. The wireless communication apparatus of claim 4, wherein, while transmitting the data in parallel, the controller applies a frequency hopping pattern to the plurality of additional channels, corresponding to a frequency hopping pattern applied to the basic channel.

6. A wireless communication apparatus for transmitting and receiving data wirelessly, comprising:

a transmitting portion for transmitting the data through a plurality of frequency channels; and

5 a controller for dividing the data for transmission by a number of frequency channels, and processing to transmit the data to a counterpart wireless communication apparatus that the wireless communication apparatus intends to communicate with.

7. The wireless communication apparatus of claim 6, wherein the plurality of frequency channels include a basic channel for supporting a communication with other wireless communication apparatuses having a

single channel, and a plurality of additional channels consecutively or
5 inconsecutively positioned with respect to the basic channel.

8. The wireless communication apparatus of claim 7, wherein,
while transmitting the data in parallel, the controller applies a frequency
hopping pattern to the plurality of additional channels, corresponding to a
frequency hopping pattern applied to the basic channel.

9. The wireless communication apparatus of claim 6, wherein,
when the data for transmission is real time data, the controller grades the real
time data, and transmits essential data of a basic grade for utilization of the
real time data through the basic channel, and transmits the data of other grades
5 through the plurality of additional channels.

10. The wireless communication apparatus of claim 6, wherein the
controller obtains a number of transmittable channels of a counterpart wireless
communication apparatus that the wireless communication apparatus intends
to communicate with by checking whether the counterpart wireless
5 communication apparatus receives data in the respective channels, and
transmits the data through the transmitting portion according to the obtained
number of transmittable channels of the counterpart wireless communication
apparatus.

11. The wireless communication apparatus of claim 10, wherein,
when the counterpart wireless communication apparatus receives the data

through one channel, the controller transmits the data through a basic channel.

12. A method of a wireless communication apparatus for transmitting and receiving data wirelessly, comprising the steps of:

- a) obtaining a number of transmittable frequency channels of a counterpart wireless communication apparatus, via a source wireless communication apparatus; and
- 5 (b) transmitting the data according to the number of transmittable frequency channels of the counterpart wireless communication apparatus.

13. The method of claim 12, wherein, when the counterpart wireless communication apparatus receives the data through a plurality of frequency channels, the step b) transmits the data through the plurality of frequency channels.

14. The method of claim 12, wherein, when the wireless communication apparatus is operated as a master, the wireless communication apparatus obtains the number of transmittable frequency channels of the counterpart wireless communication apparatus by performing an inquiry 5 operation on the counterpart wireless communication apparatus.

15. The method of claim 12, wherein the frequency channels comprise a basic channel for supporting a communication with other wireless communication apparatuses having a single channel, and a plurality of

additional channels consecutively or inconsecutively positioned with respect
5 to the basic channel.

16. The method of claim 15, wherein, when the data is transmitted in parallel, a frequency hopping pattern is applied to the plurality of additional channels, corresponding to a frequency hopping pattern applied to the basic channel.

17. A method of a wireless communication apparatus for transmitting and receiving data wirelessly, comprising the step of dividing the data for transmission by a number of a plurality of frequency channels, and transmitting the data to a counterpart wireless communication apparatus that
5 the wireless communication apparatus intends to communicate with.

18. The method of claim 17, wherein the plurality of frequency channels comprise a basic channel for supporting a communication with other wireless communication apparatuses having a single channel, and a plurality of additional channels consecutively or inconsecutively positioned with
5 respect to the basic channel.

19. The method of claim 17, wherein, when the data is transmitted in parallel, a frequency hopping pattern is applied to the plurality of additional channels, corresponding to a frequency hopping pattern applied to the basic channel.

20. The method of claim 17, wherein, when the data for

transmission is real time data, the data is graded into respective grades, and
essential data of a basic grade for utilization of the real time data is transmitted
through the basic channel, and the data of other grades is transmitted through
5 the plurality of additional channels.

21. The method of claim 17, further comprising the steps of:

obtaining a number of transmittable frequency channels of a
counterpart wireless communication apparatus that the wireless
communication apparatus intends to communicate with, by checking whether
5 the counterpart wireless communication apparatus receives the data in the
respective channels; and

processing to transmit the data according to the transmittable
frequency channels to the counterpart wireless communication apparatus.

22. The method of claim 21, wherein, when the counterpart
wireless communication apparatus receives the data only through one
frequency channel, the data is transmitted through a basic channel.

23. A wireless communication system comprising a plurality of
wireless communication apparatuses operated as a master or a slave, wherein a
wireless communication apparatus operated as the master obtains a number of
transmittable frequency channels of a wireless communication apparatus
5 operated as the slave, and transmits data according to the obtained number of
transmittable frequency channels of the wireless communication apparatus

operated as the slave.

24. A wireless communication system comprising a plurality of wireless communication apparatuses operated as a master or a slave, wherein the wireless communication apparatus operated as the master divides data for transmission by a number of a plurality of frequency channels, and transmits

5 the data to a wireless communication apparatus operated as the slave.